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IN THE U.S. PATENT AND TRADEMARK OFFICE

In re Application of: **Schmidl et al.**

Docket No.: **TI-31670**

Serial No.: **09/915,091**

Examiner: **R. Perez Gutierrez**

Filed: **July 25, 2001**

Art Unit: **2686**

For: **WIRELESS COMMUNICATION CHANNEL SELECTION USING PASSIVE INTERFERENCE AVOIDANCE TECHNIQUES**

APPEAL BRIEF TRANSMITTAL FORM

April 18, 2005

MAILING CERTIFICATE UNDER 37 C.F.R. §1.8(A)
I hereby certify that the above correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 18, 2005.

Robert N. Rountree

Robert N. Rountree, Reg. No. 39,347

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Transmitted herewith in triplicate is Appellants' Brief in the above-identified application.

Charge the fee under 37 C.F.R. § 1.17(c) and any additional fees, or credit overpayment to the deposit account of Texas Instruments Incorporated, Account No. 20-0668. An original and two copies of this sheet are enclosed.

Respectfully submitted,

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APPELLANTS' BRIEF

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Robert N. Rountree

Robert N. Rountree, Reg. No. 39,347

Dear Sir:

In support of their appeal of the Final Rejection of claims in the above-referenced application, appellants respectfully submit herein their brief.

1. REAL PARTY IN INTEREST

Texas Instruments Incorporated is the real party in interest.

2. RELATED APPEALS AND INTERFERENCES

No other related appeals or interferences are known to appellants.

3. STATUS OF CLAIMS

Claims 1-3 and 5-32 are in the application. Claims 1, 3, 5, 8-10, 12-16, 18-20, 22, 24-26, 29, 30, and 32 are rejected under 35 U.S.C. § 102(b). Claims 2, 6-7, 21, 23, 27, and 28 are rejected under 35 U.S.C. § 103(a). Examiner in an Office Action of November 3, 2004 made final rejection of claims 1-3 and 5-32. Claims 1-3 and 5-32 are on appeal and are reproduced in the Appendix to Appellants' Brief filed herewith.

4. STATUS OF AMENDMENTS

Claims 1-21 were filed on July 25, 2001, with the instant application. Appellants cancelled claim 4, amended claims 1-3, 5-8, and 11-13, and added new claims 22-32 under 37 C.F.R. § 1.111 on July 14, 2004, in response to Examiner's initial Office Action dated March 4, 2004. Appellants filed a response under 37 C.F.R. § 1.112 on January 3, 2005, requesting reconsideration in response to a final rejection on November 3, 2004. No amendment was filed subsequent to final rejection. In an Advisory Action of March 16, 2005, Examiner stated that the request for reconsideration does not place the application in a condition for allowance.

5. SUMMARY OF INVENTION

The invention of claims 1-3 and 5-12 is directed to a method of selecting frequency bands in wireless communication as exemplified by the flow chart of Figure 1 and described at page 6, line 15 through page 8, line 15 of the instant specification. The method includes the step of passively monitoring a plurality of frequency bands to determine interference information for each of the frequency bands. In a preferred embodiment of the present invention, this interference information is accomplished by making RSSI (received signal strength indication) measurements. (page 4, lines 16-19). This step is performed by iteratively tuning a filter to each selected band 12 and making passive observations 13 to determine channel quality/interference information. (page 6, line 22 through page 7, line 7). Interference information for each narrow band observation 15 is combined 16 to produce a signal quality indication. In a preferred

embodiment of the present invention, respective RSSI measurements for each frequency band are summed to produce a resultant RSSI measurement for the corresponding wide band channel in which the observed narrow bands exist. (page 8, lines 6-8). When passive observations are completed on the plurality of frequency bands, a wide frequency band is selected. In one embodiment, this selection is made by another communication device 26 in response to the band observations 25. (page 7, line 21 through page 8, line 2). In another embodiment, this selection 19 is made by the communication device that determines the interference information. (page 8, lines 6-11).

The invention of claims 13-21 is directed to an exemplary wireless communication station of Figures 2 and 3. The wireless communication station includes an antenna 24 and a band selection controller 29. The band selection controller 29 of Figure 2 is shown in detail at Figure 3. The band selection controller selects a frequency band for use in a desired wireless communication from among a plurality of frequency bands. (page 8, line 16 through page 10, line 15). The band selection controller passively monitors at least one of the available frequency bands to determine whether the at least one frequency band is acceptable for the desired wireless communication. (page 9, lines 5-15). The band selection controller is also selects a bandwidth of the available frequency bands. (page 9, lines 19-22). The band selection controller is further operable to select the frequency band for the desired wireless communication if the at least one frequency band is determined to be acceptable. (page 10, lines 8-15).

The invention of claims 22-32 is directed to a method of selecting a frequency band for a wireless communication device such as the exemplary wireless communication station of Figures 2 and 3. The method includes selecting a frequency band (page 8, line 16 through page 10, line 15) and a bandwidth of the frequency band (page 9, lines 19-22). The frequency band is passively monitored to determine whether it is acceptable for the desired wireless communication. (page 9, lines 5-15). The frequency band is selected for the desired wireless communication if the frequency band is determined to be acceptable by said passive monitoring. (page 10, lines 8-15).

6. ISSUES

A. Whether Van De Berg (U.S. Patent No. 5,907,812) discloses "combining the interference information of said each of the frequency bands to produce a signal quality indication" as recited by claims 1-3 and 5-11.

B. Whether Van De Berg (U.S. Patent No. 5,907,812) discloses "said band selection controller operable for selecting a bandwidth of the at least one of the available frequency bands as recited by claims 12-21 or "selecting a bandwidth of the frequency band" as recited by claims 22-32.

7. GROUPING OF CLAIMS

Claims 1-3 and 5-32 do not stand or fall together. Claims 1-3 and 5-11 stand separately as directed to the exemplary embodiment of Figure 1. Claims 12-32 stand separately as directed to the exemplary embodiments of Figures 2-3.

8. ARGUMENT

Examiner has rejected claims 1, 3, 5, 8-10, 12-16, 18-20, 22, 24-26, 29, 30, and 32 as being anticipated by Van De Berg (U.S. Pat. No. 5,907,812) under 35 U.S.C. § 102(b). Examiner has rejected claims 2, 6-7, 21, 23, 27, and 28 as being unpatentable under 35 U.S.C. § 103(a). Appellants respectfully submit that independent claims 1, 13, and 22 are not anticipated by Van De Berg for the following reasons and that patentability of claims 1, 13, and 22 overcomes the instant rejections under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) of all depending claims.

Claims 1-3 and 5-11 stand separately as directed to the exemplary embodiment of Figure 1. They are separately patentable as discussed below under issue **A**. Claims 12-32 stand separately as directed to the exemplary embodiments of Figures 2-3 and are separately patentable as discussed below under issue **B**.

A. Independent claim 1 is rejected as being anticipated by Van De Berg under 35 U.S.C. § 102(b). Claim 1, as amended, recites "A method of selecting a plurality of frequency bands for use in a desired wireless communication from among a plurality of frequency bands available to be used for the desired wireless communication, comprising: passively monitoring the plurality of frequency bands to determine interference information for each of the frequency bands; *combining the interference information of said each of the frequency bands to produce a signal quality indication*; and *selecting the plurality of frequency bands for the desired wireless communication in response to the signal quality indication*." (emphasis added). This method of summing interference levels of individual frequency bands is described in detail at page 8, lines 3-8 and at page 10, lines 2-15 of the instant application.

Van De Berg does not anticipate claim 1 for the following reasons. First, Van De Berg DOES NOT DISCLOSE the step of "combining the interference information of said each of the frequency bands to produce a signal quality indication." Examiner cites Figure 7 steps 2-6 and column 9 lines 4-44 as an anticipatory disclosure. (Advisory Action 3/16/05). Therein, Van De Berg discloses comparison of individual narrow band frequencies against a threshold value to determine that each narrow band frequency is essentially free of interference. For example, Van De Berg discloses "At each carrier frequency position, a detection is carried out for the presence of interference, indicated by step 3 'INTERFERENCE DETECTION'. With decision step 4 'INTERFERENCE FREE', it is tested whether the particular carrier frequency position is essentially free of interference; i.e. such that a reliable communication could be established over this part of the radio frequency band. If negative 'No', scanning has to be proceeded at another carrier frequency position. In the affirmative 'Yes', the result of the scan at the particular carrier frequency position will be processed in step 5 'FORM BAND'." (col. 9, lines 6-17). Thus, Van De Berg detects interference at a carrier frequency position at step 3 of Figure 7. Then a pass/fail decision is made at step 4 for that carrier frequency position based only on interference detected at that carrier frequency position. Van De Berg DOES NOT DISCLOSE that interference detected at any other carrier frequency position is considered in the pass/fail decision at step 4. Each carrier frequency is either accepted or rejected at step 4 based only on the interference

detected at that frequency. Thus, Van De Berg DOES NOT DISCLOSE the step of "combining the interference information of said each of the frequency bands to produce a signal quality indication" as required by claim 1.

Second, Van De Berg DOES NOT DISCLOSE producing a signal quality indication as required by claim 1. Here, the "signal quality indication" is produced in the step of "combining the interference information of said each of the frequency bands to produce a signal quality indication." Since Van De Berg DOES NOT DISCLOSE the step of combining, Van De Berg also DOES NOT DISCLOSE producing the signal quality indication as required by claim 1.

Finally, Van De Berg DOES NOT DISCLOSE the step of "selecting the plurality of frequency bands for the desired wireless communication in response to the signal quality indication" as required by claim 1. Van De Berg selects each individual carrier frequency based only on the interference detected at step 3 (Figure 7) for that carrier frequency. Van De Berg DOES NOT DISCLOSE the step of "combining the interference information of said each of the frequency bands to produce a signal quality indication." Thus, Van De Berg necessarily DOES NOT DISCLOSE "selecting the plurality of frequency bands for the desired wireless communication in response to the signal quality indication" as required by claim 1. For all the foregoing reasons, appellants respectfully submit that Van De Berg does not anticipate independent claim 1 of the present invention. Thus, claim 1 and depending claims 3, 5, 8-10, 12 are patentable over Van De Berg under 35 U.S.C. § 102(b). Claims 2, 6-7, and 11 are also patentable under 35 U.S.C. § 103(a) as depending from patentable claim 1.

In an Advisory action dated March 16, 2005, Examiner maintained the rejection of independent claim 1 "because in Van De Berg's invention the results of the scanning step (i.e., whether or not each of the frequency bands is free of interference (i.e., has good signal quality)) are combined to create a desired frequency band free of interference for the wireless communication (figure 7 and column 9 lines 4-44)." Appellants respectfully submit that this reference to Van De Berg fails to disclose "combining the interference information of said each of the frequency bands to produce a signal quality indication" as required by claim 1 for the

following reasons. First, Van De Berg tells us that it does not. Van De Berg states with reference to Figure 7 "the result of the scan *at the particular carrier frequency position* will be processed in step 5 'FORM BAND.'" (emphasis added)(col.9, lines 15-17). Thus, only the scan result at one frequency is considered when that frequency is concatenated with other frequencies at step 5. Van De Berg DOES NOT DISCLOSE combining interference information of any other frequency bands to produce a signal quality indication at step 5.

Second, what does Van De Berg mean when he says "the result of the scan at the particular carrier frequency position *will be processed* in step 5 'FORM BAND'"? (emphasis added)(col.9, lines 15-17). He only means that individual frequencies are concatenated to form a frequency band at step 5 (FORM BAND) based on the threshold test at step 4. (col. 9, lines 18-21). If there is any other meaning, it is simply not disclosed.

Third, in the Advisory action dated March 16, 2005, Examiner rejects claim 1 "because in Van De Berg's invention the results of the scanning step (i.e., whether or not each of the frequency bands is free of interference (i.e., has good signal quality)) are combined to create a desired frequency band free of interference for the wireless communication (figure 7 and column 9 lines 4-44)." Here, Examiner mischaracterizes Van De Berg's disclosure and ignores the language of claim 1. Van De Berg states "*the result of the scan at the particular carrier frequency position* will be processed in step 5 'FORM BAND.'" (emphasis added)(col.9, lines 15-17). Examiner has changed "result of the scan at a particular frequency" to "results of the scanning step . . . are combined." Neither Van De Berg's disclosure nor Examiner's mischaracterization, however, discloses "combining the interference information of said each of the frequency bands to produce a signal quality indication" as required by claim 1."

Finally, if Examiner intends for the scanning step of Van De Berg to include steps 2-4 (Figure 7), then Van De Berg discloses comparison of individual narrow band frequencies against a threshold value to determine that each narrow band frequency is essentially free of interference. (Figure 7, col. 9, lines 6-13). Van De Berg further discloses that individual frequencies are concatenated to form a frequency band at step 5 based on the threshold test at

step 4. (col. 9, lines 18-21). The "combining" step of claim 1, however, is not directed to combining frequencies. Rather, claim 1 recites "combining the interference information of said each of the frequency bands to produce a signal quality indication." Van De Berg simply fails to disclose this feature of the claimed invention.

The invention of claim 1 is significantly different from the disclosure of Van De Berg. The present invention advantageously combines interference information of individual narrow band frequencies to produce a signal quality indication. It then uses the signal quality indication to select an acceptable wide band carrier. In this manner, individual narrow band frequencies with relatively higher levels of interference may still be acceptable for wide band communication. Moreover, when many narrow band frequencies of the wide band carrier have an interference level near a predetermined threshold level, the wide band carrier might be deemed acceptable according to Van De Berg. The present invention, however, might advantageously reject the wide band carrier due to the cumulative interference level. For all the foregoing reasons, Appellants respectfully submit that claim 1 and depending claims 3, 5, 8-10, 12 are patentable over Van De Berg under 35 U.S.C. § 102(b). Furthermore, claims 2, 6-7, and 11 are also patentable under 35 U.S.C. § 103(a) as depending from patentable claim 1.

B. Independent claim 13 is rejected under 35 U.S.C. § 102(b) as being anticipated by Van De Berg. Independent claim 13 recites "A wireless communication station, comprising: an antenna for use in wireless communications; a band selection controller coupled to said antenna for selecting a frequency band for use in a desired wireless communication from among a plurality of frequency bands available to be used for the desired wireless communication; said band selection controller operable for passively monitoring at least one of the available frequency bands to determine whether the at least one frequency band is acceptable for the desired wireless communication; *said band selection controller operable for selecting a bandwidth of the at least one of the available frequency bands*; and said band selection controller further operable for selecting the at least one frequency band for the desired wireless communication if the at least one frequency band is determined to be acceptable." (emphasis added). This method of bandwidth selection is described in detail at page 4, lines 9-21, page 9, lines 19-22, and page 10,

lines 2-5 of the instant specification. For example, bandwidth selection may be used for RSSI (received signal strength indication) measurement to avoid microwave oven interference. (page 4, lines 19-21).

Van De Berg DOES NOT DISCLOSE bandwidth selection of the present invention. Examiner states "e.g., the bandwidth of the at least one available frequency band is selected, if deemed acceptable, to form, by itself or in combination with other acceptable available frequency bands, the at least one frequency band for the desired communication." (Office Action 11/3/04, page 5, last paragraph). Appellants respectfully disagree. Van De Berg discloses selection of a carrier frequency position at steps 2-4 of Figure 7. (col. 9, lines 6-13). Van De Berg DOES NOT DISCLOSE bandwidth selection. Moreover, Examiner fails to cite any relevant disclosure of Van De Berg concerning bandwidth selection by a band selection controller. Appellants respectfully submit that Examiner's *ipse dixit* is insufficient to justify a rejection under 35 U.S.C. § 102(b). Examiner has characterized a combination of scanning means 52 and central control and application logic 51 (Figures 11-13) as a band selection controller of the present invention. Examiner has failed to identify any teaching or suggestion by Van De Berg related to bandwidth selection by a band selection controller. Thus, appellants respectfully submit the instant rejection of claim 13 and depending claims 14-16 and 18-20 under 35 U.S.C. § 102(b) is improper.

Van De Berg discloses "These and other objects, advantages and features of the present invention are provided by a method for radio communication in a predetermined radio frequency band between a first transceiver unit and a second transceiver unit. The units are arranged to transmit and receive over a communication frequency band modulated at a carrier frequency, whereas the frequency bandwidth of the radio frequency band is larger than the communication frequency band." (col. 2, lines 56-64). The radio frequency band and the communication frequency band, therefore, are both predetermined. Thus, the communication frequency bandwidth of Van De Berg cannot be selected by a combination of scanning means 52 and central control and application logic 51 as suggested by Examiner. It is fixed by the communication system. In fact, the preamble of each of Van De Berg's independent claims recites "radio communication in a *predetermined radio frequency band.*" (emphasis added). Van De Berg

DOES NOT DISCLOSE bandwidth selection and specifically teaches that bandwidth is predetermined in the text of the specification and in the claims. Thus, claim 13 and depending claims 14-16 and 18-20 are patentable under 35 U.S.C. § 102(b) over Van De Berg.

In an Advisory action dated March 16, 2005, Examiner maintained the rejection of independent claims 13 and 22 stating that "Van de Berg clearly discloses bandwidth selection." Examiner further states "what is being selected in Van de Berg is which carrier frequency bands are used to form the desired frequency band for wireless communication (see figure 7 and column 9 lines 1-44). Here, Examiner again ignores the language of claim 13. Claim 13 recites at least four features of a band selection controller of the present invention (Figures 2 and 3). These four features are 1) "selecting a frequency band for use in a desired wireless communication from among a plurality of frequency bands," 2) "passively monitoring at least one of the available frequency bands," 3) "selecting a bandwidth of the at least one of the available frequency bands," and 4) "selecting the at least one frequency band for the desired wireless communication if the at least one frequency band is determined to be acceptable." Examiner's reference to Van De Berg's disclosure of "which carrier frequency bands are used to form the desired frequency band for wireless communication" is directed to the fourth feature of claim 13. Both Van De Berg and Examiner remain silent on the third feature of claim 13. There is simply no disclosure of "said band selection controller operable for selecting a bandwidth of the at least one of the available frequency bands" by Van De Berg. The instant specification discloses that the band selector 34 (Figure 3) may select a wide (or narrow) band channel for observation in response to user input 30 and/or the current channel quality information on lead 35. (page 9, lines 19-22). If narrow frequency bands are observed, the band selector 34 is operable to sum the energy in the narrow band measurements to produce a resultant wide band measurement. (page 10, lines 5-7). As previously stated, these features are notably absent in the disclosure of Van De Berg as well as Examiner's rejection. Thus, claim 13 and depending claims 14-16 and 18-20 are patentable under 35 U.S.C. § 102(b) over Van De Berg. Furthermore, claims 17 and 21 are also patentable under 35 U.S.C. § 103(a) as depending from patentable claim 13.

Independent claim 22 is rejected as being anticipated by Van De Berg. Claim 22 recites "A method of selecting a frequency band for use in a desired wireless communication from among a plurality of frequency bands to be used for the desired wireless communication, comprising: selecting the frequency band; *selecting a bandwidth of the frequency band*; passively monitoring the frequency band to determine whether the frequency band is acceptable for the desired wireless communication; and selecting the frequency band for the desired wireless communication if the frequency band is determined to be acceptable by said passive monitoring." (emphasis added). These limitations are described in detail at page 4, lines 9-14 and page 10, lines 2-5. As previously discussed, Van De Berg DOES NOT disclose bandwidth selection. Thus, for all the foregoing reasons, claim 22 and depending claims 24-26, 29-30, and 32 are patentable under 35 U.S.C. § 102(b) over Van De Berg. Furthermore, claims 23, 27-28, and 31 are also patentable under 35 U.S.C. § 103(a) as depending from patentable claim 22.

In summary, **Examiner has erred** in concluding that Van De Berg discloses all the claimed elements. Examiner has repeatedly failed to identify required features of independent claims 1, 13, and 22 in the disclosure of Van De Berg in the Office Action of November 3, 2004 and the Advisory Action of March 16, 2005. Thus, Appellants maintain that independent claims 1, 13, and 22 are patentable under 35 U.S.C. § 102(b) over Van De Berg. Examiner offers no other basis for rejecting claims 1, 13, and 22. Thus depending claims 2-3, 4-12, 14-21, and 23-32 are also patentable under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a).

In view of the above, appellants respectfully request favorable consideration of the appeal from Final Rejection in the above referenced application and its reversal.

Respectfully submitted,

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9. APPENDIX

CLAIMS ON APPEAL

1. A method of selecting a plurality of frequency bands for use in a desired wireless communication from among a plurality of frequency bands available to be used for the desired wireless communication, comprising:

passively monitoring the plurality of frequency bands to determine interference information for each of the frequency bands;

combining the interference information of said each of the frequency bands to produce a signal quality indication; and

selecting the plurality of frequency bands for the desired wireless communication in response to the signal quality indication.

2. The method of Claim 1, wherein said passive monitoring step includes monitoring communication quality associated with the plurality of frequency bands.

3. The method of Claim 1, wherein said passive monitoring step includes monitoring interference associated with the plurality of frequency bands.

5. The method of Claim 1, wherein said plurality of frequency bands are narrow frequency bands comprising a wide frequency band.

6. The method of Claim 5, wherein the wide frequency band is an IEEE 802.11b band.

7. The method of Claim 1, wherein at least one frequency band of the plurality of frequency bands is a Bluetooth 2.0 band.

8. The method of Claim 1, wherein said passive monitoring step includes each of two wireless communication stations passively monitoring at least some of said plurality of frequency bands.

9. The method of Claim 8, including one of said wireless communication stations communicating with the other of said wireless communication stations regarding results of said passive monitoring.

10. The method of Claim 1, wherein said passive monitoring step includes passively monitoring a group of the available frequency bands, and tuning a filter to each of said group of available frequency bands.

11. The method of Claim 1, wherein the plurality of frequency bands includes a frequency band associated with microwave oven interference.

12. The method of Claim 1, wherein said selecting step includes the wireless communication station selecting the plurality of frequency bands for the desired wireless communication and informing another wireless communication station of the selected frequency bands.

13. A wireless communication station, comprising:

an antenna for use in wireless communications;

a band selection controller coupled to said antenna for selecting a frequency band for use in a desired wireless communication from among a plurality of frequency bands available to be used for the desired wireless communication;

said band selection controller operable for passively monitoring at least one of the available frequency bands to determine whether the at least one frequency band is acceptable for the desired wireless communication;

said band selection controller operable for selecting a bandwidth of the at least one of the available frequency bands; and

said band selection controller further operable for selecting the at least one frequency band for the desired wireless communication if the at least one frequency band is determined to be acceptable.

14. The wireless communication station of Claim 13, wherein said band selection controller includes an interference monitor for monitoring interference associated with the at least one frequency band.

15. The wireless communication station of Claim 14, wherein said interference monitor includes an RSSI measurement apparatus.

16. The wireless communication station of Claim 13, including a wireless communications interface coupled between said antenna and said band selection controller, said wireless communications interface cooperable with said band selection controller and said antenna for communicating to another wireless communication station information indicative of a result of said passive monitoring operation.

17. The wireless communication station of Claim 13, including a wireless communications interface coupled between said antenna and said band selection controller, said wireless communications interface cooperable with said antenna for receiving and providing to said band selection controller a passive monitoring result which is associated with the at least one frequency band and which has been obtained and transmitted by another wireless communication station, said band selection controller operable for determining whether the at least one frequency band is acceptable for the desired wireless communication in response to said result received from said another wireless communication station.

18. The wireless communication station of Claim 13, wherein said band selection controller includes a filter coupled to said antenna for tuning to each of a group of the available frequency bands, said band selection controller including a passive monitor coupled to said filter for passively monitoring each of said group of available frequency bands.

19. The wireless communication station of Claim 13, including a wireless communications interface coupled to said antenna for interfacing between said antenna and a communications

application, said band selection controller including a portion of said wireless communications interface.

20. The wireless communication station of Claim 19, wherein said portion of said wireless communications interface includes a filter for tuning to the at least one frequency band and an RSSI measurement apparatus coupled to said filter for providing an RSSI measurement with respect to the at least one frequency band.

21. The wireless communication station of Claim 13, provided as one of a Bluetooth station and an IEEE 802.11b station.

22. A method of selecting a frequency band for use in a desired wireless communication from among a plurality of frequency bands to be used for the desired wireless communication, comprising:

selecting the frequency band;

selecting a bandwidth of the frequency band;

passively monitoring the frequency band to determine whether the frequency band is acceptable for the desired wireless communication; and

selecting the frequency band for the desired wireless communication if the frequency band is determined to be acceptable by said passive monitoring.

23. The method of Claim 22, wherein said passive monitoring step includes monitoring communication quality associated with the frequency band.

24. The method of Claim 22, wherein said passive monitoring step includes monitoring interference associated with the frequency band.

25. The method of Claim 24, wherein said passive monitoring includes making a received signal strength indicator measurement with respect to the frequency band.

26. The method of Claim 22, wherein said passive monitoring step includes passively monitoring a plurality of narrow frequency bands, and combining results of said passive monitoring of said narrow frequency bands to produce a wide band result corresponding to the frequency band.

27. The method of Claim 22, wherein the frequency band is an IEEE 802.11b band.

28. The method of Claim 22, wherein the frequency band is a Bluetooth 2.0 band.

29. The method of Claim 22, wherein said passive monitoring step includes each of two wireless communication stations passively monitoring at least some of said plurality of available frequency bands.

30. The method of Claim 29, including one of said wireless communication stations communicating with the other of said wireless communication stations regarding results of said passive monitoring.

31. The method of Claim 22, wherein the frequency band is a frequency band associated with microwave oven interference.

32. The method of Claim 22, wherein said passive monitoring step includes a wireless communication station passively monitoring a group of frequency bands, and said selecting step including the wireless communication station selecting the frequency band for the desired wireless communication and informing another wireless communication station of the selected frequency band.